

REMARKS

In the above-captioned Office Action, claims 1, 2, 13 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Atkinson (U.S. Patent No. 5,883,884), claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Atkinson, and claims 3-10 and 15-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Atkinson in view of Frodigh et al. (U.S. Patent No. 6,456,627, hereinafter "Frodigh"). The applicants respectfully disagree with the Examiner's claim rejections and request reconsideration.

In the *Background* section of the present application, the applicant refers to a prior art approach to providing guard times as follows (emphasis added):

Consequently, the mobile unit needs both transmit-to-receive and receive-to-transmit guard times to assure proper operation. Unfortunately, TDM inherently does not provide for such guard times for the mobile unit. **Prior systems have attempted to alleviate this problem by shortening the uplink signal bursts to create the necessary guard times.** This solution however reduces the uplink bit rate and wastes transmit power.

Accordingly, there is a need in the art for a method and system which provides the necessary guard times while maintaining bit rates in the uplink and downlink.

The applicants assert that Atkinson merely teaches a prior art approach to providing guard times that the present application specifically mentions to illustrate the problems that exist in the prior art.

Atkinson refers to guard times in several places. At column 6, lines 26-32 Atkinson says(emphasis added):

The typical outbound TDM burst format is shown in FIG. 4a, and contains information transmitted from the base to the repeaters and remote units. **A guard time 400 is inserted prior to the first information in the outbound TDM burst** to allow for the repeaters and remote units to switch from transmission mode to reception mode.

At column 6, line 57 – column 7, line 16 Atkinson says (emphasis added):

The typical inbound TDMA burst format is shown in FIG. 4b, and typically contains information transmitted in individual time slots 421, 422, 423, 424 from the remote units through repeaters or directly to the base. Each inbound time slot 421-424 in the TDMA burst **includes a guard time 425 separating the time slot from the preceding time slot** to allow for propagation delay of the bursts through varying levels of repeaters. Each time slot 421-424 typically includes, following **guard time 425**, a sync word block 426, sys ID block 427, rem ID block 428, message to base block 429, and voice or data block 430. Sync word 426 has the same function as sync word 401 (FIG. 4a) described above. Sys ID block 427 allows repeaters to identify remote units associated with the same system as the repeater. Rem ID block 428 informs the base which remote unit is transmitting. Message to base block 429 is utilized to send information including: on/off hook requests, dialing information, feature requests, call set-up requests and other communication between the remote units and the base. Voice or data block 430 typically contains digitized voice, video, or other data being sent to the base. Since inbound TDMA bursts originate from varying remote units, each remote unit burst has its own sync word 426, Sys ID block 427, rem ID block 428, message to base block 429, and voice or data block 430. The inbound TDMA bursts typically require greater time than the outbound TDM bursts because **guard time 425 is inserted between each inbound block**.

At column 7, lines 53-56 Atkinson says (emphasis added):

If path switching occurs during a call, the call resides in the same time slot on the new signal. Such call switching occurs during the **guard time** between bursts (FIG. 4A, 4B) so as not to disturb ongoing calls.

Thus, the applicants submit that Atkinson clearly teaches creating guard times **between** time slots or data bursts in which information is transmitted. In contrast, claim 1 and claim 13 claim (emphasis added):

1. A method for communicating between a base transceiver station and a mobile unit comprising the steps of:

transmitting a downlink signal burst from the base transceiver station to the mobile unit, the downlink signal burst **containing a selected number of bits** having a first time length; and

transmitting an uplink signal burst from the mobile unit to the base transceiver station, the uplink signal burst **containing the selected number of bits** having a second time length, and

wherein the first time length is shorter than the second time length thereby providing a guard time.

13. A system for wireless communication comprising:

a base transceiver station for **transmitting** a downlink signal burst **containing a selected number of bits** having a first time length; and

a mobile unit for **transmitting** an uplink signal burst **containing the selected number of bits** having a second time length, from the mobile unit to the base transceiver station, and

wherein the first time length is shorter than the second time length thereby providing a guard time.

Thus, as claimed, a guard time is created by the difference in time it takes to transmit the same number of bits, not by merely inserting time into the transmission sequence as the prior art teaches. The applicant does not see how Atkinson teaches or suggests a time difference in the transmission of the same number of bits, as claimed, in order to provide a guard time. In fact, the applicant submits that Atkinson teaches away from such an approach and merely supports inserting guard times between information transmissions, as the present application notes in its *Background* section.

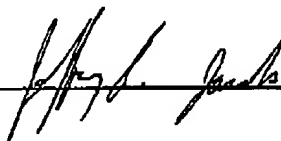
Since neither Atkinson nor Frodigh, either independently or in combination, teach all of the limitations of the present independent claims, or therefore, all the limitations of their respective dependent claims, each of which includes the all limitations of one of these independent claims, the applicants assert that the Examiner has not shown anticipation nor made a prima facie case

for obviousness. The applicants now respectfully submit that the claims in their present form are patentable over the prior art of record, and are in condition for allowance. As a result, allowance of this case and early passage to issue is earnestly solicited.

The Examiner is invited to contact the undersigned, if such communication would advance the prosecution of the present application. Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. 502117.

Respectfully submitted,
Wilson

By: _____



Jeffrey K. Jacobs
Agent for Applicant
Registration No. 44,798
Phone No.: 847/576-5562
Fax No.: 847/576-3750